

Participation in Farmers' Group and House-Hold Food Security in Isokan Local Government Area of Osun State, Nigeria

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Abstract

The study assessed the importance of participation in farmers' groups or associations by the rural farmers in reducing household food insecurity among the rural household in Isokan Local Government Area of Osun state of Nigeria. Issue of food security is an on-going research focal point in the recent times and has received considerable awareness from international agencies, research institutions, planners and various national governments. For so many institutions be it government based or non-governmental, the approach of reaching many rural dwellers, who are major susceptible victims of endemic food insecurity, is of major concern. An average farmer, especially in Nigeria belongs to one farmers' group or the other with the aim of leveraging on the social derived from such group to exit poverty brought upon such due to poor food insecurity. The major operations and tenets practice within the farmers' groups or associations can be considered as a fundamental in planning intervention programmes for rural farmers. The tenets or practices can be mainstreamed, when understood, into extension strategies, in helping farmers overcome challenges to household food security. The study was carried in Isokan Local government area of Osun state, in south-western Nigeria. A total number of ninety questionnaires were administered to the rural farmers, who belong to farmer' groups within their localities. The unit of analysis was the household head, the period of research was the month of February, 2012. Seventy-eight per cent of the respondents were male while twenty-one per cent were female. The forty-nine per cent of the respondents has family size between five and eight people. There was no significant relationship between sex, marital status and participation in farmers' group, (the chi-square $P \leq 0.430$ and $P \leq 0.275$ respectively). There was significant relationship with educational level of the respondents and their participation in farmers' groups (the chi-square value is $P \leq 0.0001$). The same goes for age with chi-square value of 0.335. The study also revealed that, there is significant relationship between farm size cultivation and participation in farmer's groups. The study revealed further that, there is significant relationship between respondents' perception of membership of farmers' group and the effect on the food security of the households, the chi-square value is 32.882. The study revealed that farmers' groups can be enhanced by empowering them with requisite information and strategies on household food security, as the farmers can be reached using the groups they can repose their trust in.

Keywords: Livelihood Activities. Food Security. Rural Farmers. Household.

1. Introduction

The issues of food security in Nigeria are increasingly becoming a critical part of on-going discussion both at local and international level. The situational analyses in Nigeria truly reflect the dimension of food security not only in Nigeria but in sub-Saharan Africa.

Food security refers to the condition, in which all people, at all times, have physical, social, and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO/WHO 1992; FAO1996).

At the household level, food security implies an adequate access to food over time. This is possible when there is adequate food availability to the household, and an adequate income capacity for the purchase of the available food. Stability of food implies that the food availability is not affected by any shocks or risks affecting food production at all times. (Akinyele 2009).

An important dimension to household food security in the effects the farmers' group or association will have on the farmers' household. Agbamu (2006) submitted that decision-making for the farm family is the settlement of questions which arise from the day-to-day and season-to-season operations of the farm. It implies mental confrontation with the structure of ideas, problems and the settlement of these issues into concrete action guidelines or actionable opinions. It involves taking into account all factors within the farm's production and social environment, making choices, discriminating on the basis of feasibility, and hence identifying consequences for alternative actions. Farmers' decision making usually involves choosing a course of action from number of alternatives that will enable the farmer achieve that will enable the farmer achieve his or her objectives. It can be deduced from the assertions, that there is possibility that the farmers' decision can be influenced by many factors, which farmers' group or association is one. Fliegel (1984), labelled social environment that influences the farmers' decision, this includes state and local environs, family, Ethnic and religious groups. Farmers' sources of information fundamentally shape the kind of decisions they make. Sources

of information and acquired knowledge from those sources constitute the foundation on which many decisions of farmers are based.

The farmers' groups or associations can be termed as part of social capital available to the farmers. Their influence in terms of information on better or improved farm practices, storage techniques, marketing outlets and other life improving tactics would go a long way to impact the farmers' decision about food consumptions.

In the submission of Agbamu (2006), the greater participation of a farmer in social activities outside household or locally can contribute to social change. Ekong (1988) posited that positive correlation exists between Nigerian farmers' level of participation in community life and adoption of agricultural innovations. Despite these assertions, there is dearth of study to show how membership of social groups like farmers group will influence farmers' knowledge and attitude towards food security among the rural household. The various discussions and deliberations that occur within the farmers' group can possibly serve as pedestal by which an average farmer will rest upon to make decision about farm cultivation, storage, marketing and processing that will predispose him to be food secured. Rural researches that are engrossed by the notion that have regarded formal practices related to local informal institutions as traditional and regressive. Hence, there has been little attention given to understand a variety of formalities performed by local people. It is, however, impossible to thoroughly understand rural livelihoods and food security situations without having insights into some of the local institutions and related formalities, which form some of the components of social capital.

Therefore this study will seek to investigate the contribution of how farmers' membership of social group and association will affect their knowledge and attitude towards household food security.

1.1 Materials and Methodologies

The study area of the research was Isokan local government council of Osun State of Nigeria. The study population is all registered farmers with department of agriculture and natural resources of Isokan local government area. The 90 farmers were randomly selected from the list.

The source of data collection for the study was through primary and secondary sources. Data were collected through administering of questionnaire to the respondents with six questionnaire not retrieved and eighty-four retrieved.

The instrument for data collection was subjected to pre-existing validation and reliability tests through include face validity-to determine the extent to which the instrument measures what was designed to measure, and consistency within the instruments The data was analysed by frequency distribution, means and percentage, Chi-square and Pearson product moment correlation were used to explore relationship between variables. The independent variables for this study are selected socio-economic characteristics (age, education, marital status, gender)

1.1.1 Result and Discussion

The results from the study covered the personal characteristics in Table1, reason for joining farmers' group and association in Table 2.

Age: Table 1 shows that majority of the respondents have their ages above 60 years which represent 53.6 % of the total respondents. This further corroborate earlier findings that farming communities are ageing, especially in south-west of Nigeria. Only 7.1 % of the respondents were between ages 18 and 40 years. The younger generation are leaving farming operations for other less intensive career. But according to Yekini (2010) and Salimonu (2007), the average of Nigerian farmer was put at 43.2 to 48.1years, the table shows that many respondents fell between 41 and 60 years, which is 39.3% of the respondents, which corroborate the findings.

Sex of the respondents: The table 1 shows that 78.6% of the respondents were male while 21.4 % were female. The rigorous farming operations are still male dominated and the issues of direct land required for agricultural production which is male dominated and leaving womenfolk disadvantaged (Oyedele 2005). Therefore, it common to find men cultivating farm lands than women in rural area.

Education: 28.6% of the respondents have tertiary education. The lack of economic viable employment might be the reason while high numbers of graduates are moving into agricultural production. The respondents are fairly literate due to the fact many of them have both primary and secondary school education. This will definitely affect their decision about adopting and use improved farm practices that can ensure food security. Ogunfiditimi (1981) found that the level of education of farmers in Oyo and Ondo states of Nigeria yielded positive significant relationship to adoption of improved varieties of cassava, maize and cocoa. He contended that the more the farmers advance in their level of education, the more they tend to understand the importance, intricacies and the need for adopting new improved farm practices. According to Ekong (1988), studies have shown that more than 40 per cent of Nigerian farmers are moderately literate are moderately literate in the language of their areas of origin and that less than this proportion have had formal education.

Marital size: 92.7% of the respondents were married while 7.1% were single. Family size which is direct result of marital status plays major role of supplying family labour for farm operations. In the submission of

Muhammed-Lawal, Omotesho and Fashola (2009), the amount of family labour available is usually closely related to the marital status of the family household.

Family size: the table 1 show that 19.0% have between 1—4 family size, 49.5% (5-8), 25.2% (9-12) and 6.3% (above 12). The result shows that large numbers of respondents have large family size which portend that there would large size of family labour and more mouths to feed. This will affect the food security of average family in the study area.

Farm size: the table1 shows that 44% of the respondents have between 6 and 10 hectares of land, 17.9% have less than 6 hectares while 38.1 % have more than 10 hectares. This implies small land holdings among the respondents. Family labour is still an important component of labour for small farmers. Omaruaye (1987) found that size of farm holding has no relationship with the family size. By virtue of large family size there is pressure on land which has become fragmented and hence small farm holdings abound.

Table 2 shows that 58.3% of the respondents joined farmers' group and association because of access to marketing channels and information for their farm produce. 21.4% of the respondents joined because of agricultural inputs like chemicals, fertilizer and seeds. It is a common process for the government agencies to relate with farmers on group basis rather than on individual basis. This may account for the respondent joining farmers' group and association to access government aids in terms of credit, training and other benefits. The results further show that all respondents joined their farmers' group because of financial credits and assistance. Okumadewa (1999) submitted that majority of the poor are rural dwellers, who lack basic agricultural equipment and inputs and are subjected to decline in productivity. In a process to adjust to their poor condition, the rural dwellers resort to join social groups that would supply the necessary farm support services they lack.

The results show that all respondents belong to one or the other crop farmers association which is umbrella body of farmers in the study areas. The umbrella farmers group have opportunities to deal directly with government agencies on behalf of their members. Outside this, the table 3 further shows that 66.7% are members of cooperative society, where the respondents can easily source for fund from pooled financial resources. 64.3% of the respondents belong to local community associations that are not necessarily agro-allied. 52.4% belong to produce association like cocoa produce merchants, oil palm processors, cassava growers and others. The respondents are well knowledgeable about the importance of deriving strong social capital by joining farmers' association. This finding corroborate the various findings that have highlighted the importance of social groups and community groups in coping with the economic pressure of adjustment (Berry 1993; Meagher and Mustapha 1997; Jamal and Weeks 1993)

The table 4 shows that all respondents have access to agro-chemicals, credit facilities and fertilizer. This shows that farmers' group and association were able to make these inputs available for their members without bureaucratic bottlenecks. It further show that farmers' group and association were only effective based on what government and donor agencies were willing and able to make available to the farmers. The table shows that only 548% of respondents could have access to seed through their groups, it is either the farmers can get the seed without a strong challenge or the group lack capacity to make them available. The majority of the respondents could access tractor for their farming operations. Ogunfidity (1981) argued that the economic status of farmers which showed positive and significant relationship with adoption portrays the fact that the more the farmers are well –off economically in terms of their ability to purchase necessary inputs such as insecticides, fertilizers, and labour, the more they are prone to adoption of new practices and increase food production.

1.1.2 Hypotheses testing:

Hypothesis 1: There is no significant relationship between selected socio-economic characteristics of respondents and membership of farmers' group.

Table 5 shows that gender has no significant relationship on membership of farmers' group. This corroborates the number of female respondents who are registered farmers in the study area. It also shows that the membership is open to willing and able farmers regardless of gender. Also marital status has no significant relationship with membership of farmers' group. It is obvious from the table that education and farm size affected how the decision of the average farmers in joining farmers' group. It can be submitted that once a farmer is knowledgeable and educated, he can be respected by other farmers who will be willing to associate with him regardless of his marital status.

There is significant relationship between age of respondent and being a member of farmers' group. Age can play a prominent role in influencing decision to join farmers' group. The finding differ with the submission of Okafor (1986), who submitted that the average Nigerian is getting old and cannot read or write and equally unwilling to learn new techniques. Some of the older farmers, according to him, have even rejected the use of fertilizers claiming that fertilizers change the taste and other properties of their food crops.

Ekong (1988) stated that studies have shown that there is no association between age and adoption behavior of farmers. Ogunfidity (1981), Jagne and Patel (1981), and Agbamu et al (1996) revealed that age of farmers does not contribute to adoption of new improved maize variety, improved practices of groundnut, and new varieties of cassava and maize respectively.

Hypothesis 2: There is no significant relationship between farm size cultivation and membership of farmers' group and association

Table 6 shows the PPMC-value showing relationship between membership of farmers group and association and farm size cultivation

Based on the result on table 6, it is possible that the farm size cultivation can be influenced by being a member of farmers' group. In the course of discussion and deliberations within the groups, knowledge can be shared about new improved farm practices that a farmer might to give a trial.

Hypothesis 3: table 7 shows there is significant relationship between respondent perception of membership of farmers' group and increases food production. The respondents perceived that the farmers groups will enable them to have access to advantages of better marketing, cultivation, acquisition of good seeds and exchange of labour. This further confirms the major reasons farmers join farmers' group and association.

1.1.3 Conclusion and Summary

Agricultural innovation can contribute to rural development through both direct and indirect effects. The relative importance of each of these will be largely determined by the speed with which households adopt new technologies relative to others, by the condition of the household as net food buyer or seller, by the degree of market liberalization that conditions whether the particular products is tradable or non-tradable, and by the institutions and incentives facing farmers' adoption of innovation. The direct effects of social capital are those benefits that are captured by the farmers who actually implemented the information learnt during the process of interaction. The main form of direct effects is higher profits from agricultural production.

New technologies can improve a farmers' income when they reduce the marginal cost of producing one unit of output. Since for a time output prices will still be driven by the prevalent (old) technology, profits will increase for those farmers who adopt the new technology.

The household food security can be further enhanced through empowerment of various farmers' group by exposing them to training on improved farm practices, basic home economics and effective food storage practices.

It is therefore recommended that:

1. Policy makers should lay more emphasis in empowering local farmers' group
2. Farming activities should be encourage among graduates and young school leavers by forming farmers' group among the well-educated farmers
3. Rural household should further be exposed to basic home economics and strategies for food security.

References:

- Agbamu, J.U (2006) "Essentials of agricultural communication in Nigeria" malthouse pLimited.Pp.123-125. 195pp
- Agbamu, J. U. (1997) "The agricultural research extension linkage system in Nigeria".
Journal of agricultural extension research, vol.1, 2.publication of agricultural extension research society of Japan, Tokyo, pp.67-77
- Agricultural Issues Center, 1994, financing Agriculture in California's New Risk Environment: Proceedings of a Conference on December 1, 1993 in Sacramento, California, Steven C. Blank, ed., Stephanie Weber, technical ed. (Agricultural Issues Center, University of California, Davis, California).
- Carney, D. (1999) Approaches to Sustainable Livelihoods for the Rural Poor. ODI Poverty Briefing, 2, January 1999.London: Overseas Development Institute.
- Gunther, A., (1998). "Effects of mass media on perceived public opinion"communication Research Vol.25, no.5, 486-504 (1998). Sage publication. Retrieved 25 July, 2008 <http://www.aces.uiuc.edu/agcomdb/view.asp>.
- Fonta W. M, Ichoku H. E and Ibor O.I (2010) Forest extraction income, poverty and inequality: empirical evidence from a community forestry area in South-eastern Nigeria. *Revised Discussion Paper Prepared for the Centre of Environmental Economics and Policy in Africa (CEEPA)*, August 2010 pp24
- Geller S. R and Osemebo J (2006) Linking national forest programmes to poverty reduction a strategies. FAO, forestry department, forest policy and institutions services Rome Italy. Pp20
- Mazon R. (2004) Role of forest industry in poverty alleviation. *FAO Advisory committee on paper and wood products-forty-fifth session-canberra, Australia 16-17 April 2004* pp33-38
- Meludu N (2004) Assessment of income generating activities that influence sustainable livelihoods of forest communities in Nigeria: implications for policy enhancement in Nigeria. *Proceedings of family, farm, and community forestry international symposium, march 29-april 1, 2004. Washington university, ed Baumgartner D.* Pp291-295
- Nzeh C.E.P and Eboh E.C (2008) Socio-economic analysis of income effects of forest products activities among households in Enugu State, Nigeria. *Journal of tropical Agriculture, Food, Enviroment and Extension, volume 7 Number. 200D* pp 22-26.
- Ogundele F O, Ayo O, and Odewumi S.G (2011) Pattern and Problems of Deforestation in south-western

Nigeria. Department of Geography and Planning, Faculty of Social Sciences Lagos State University, Ojo Lagos
International journal of academic research vol. 3. no. 3. May 2011, p 5 pp15

Omonona B.(2011) NIGERIA STRATEGY SUPPORT PROGRAM IFPRI-Abuja *International Food Policy Research Institute c/o International Centre for Soil Fertility and Agriculture Development Nigeria* pp1

Onuche U (2010) impact of poverty on the sustainability of forest in Nigeria: implication for sustainable forests and reduction in global warming. *Journal of sustainable development in Africa (volume 12 no 6, 2010), Clarion University of Pennsylvania.* Pp208-215

Table 1 Distribution of selected respondents' socio-economic characteristics.

Variable	Frequency	Percentage
Age (year)		
18-40	3	7.1
41-60	33	39.3
Above 60	45	58.6
Sex		
Male	66	78.6
Female	18	21.4
Marital status		
Single	6	7.1
Married	78	92.9
Education		
Primary	32	38.1
Secondary	26	31.0
Tertiary	24	28.6
None	6	2.4
Farm size		
1--5.9 hectares	15	17.9
6---10.9 hectares	37	44.0
Above 10.9 hectares	32	38.1
Family size		
1—4	16	19.0
5—8	41	49.5
9---12	21	25.0
Above 12	6	6.5

Source: field survey 2012

Table 2: Distribution of respondents according to the reasons for joining farmers' group

Variables	Frequency	Percentage
Marketing	49	58.3
Extension services	7	8.3
Agric. Inputs	18	21.4
Financial assistance	84	100

Source: field survey 2012

Table 3: Distribution of respondents according to membership of farmers' group

Variables	Membership	Percentage
Cooperative	56	66.7
Produce	44	52.4
Crop farmers	84	100
Community association	56	64.3

Source: field survey 2012

Table 4: Distribution of respondents according to access to agricultural inputs

Variables	Frequency	Percentage
Seed	46	54.8
Tractor	23	27.4
Agro-chemical	84	100
Credit	84	100
Fertilizer	84	100

Source: field survey 2012

Table 5a: relationship between selected socio-economic characteristics of the respondents and membership of farmers' group and association

Characteristics	Df	Chi-square	P value	Decision
Gender	2	1.688	0.430	NS
Marital status	2	2.585	0.275	NS
Education	6	56.242	0.000	S

Table 5b: Test of relationship between selected socio-economic characteristics of the respondents and membership of farmers' groups and association

Characteristics	r-value	P	Decision
Age	0.335	001	S

Significant $P \leq 0.05$ Not significant $P \geq 0.05$

S= Significant

NS=Not significant

Table 6: PPMC –value showing relationship between membership of farmers group and association and farm size cultivation

Characteristics	r-value	P	Decision
Farm size	-0.585	0.05	S

Significant $P \leq 0.05$ Not significant $P \geq 0.05$

S= Significant

NS=Not significant

TABLE 7: test of relationship between the perception of respondents of membership of farmers' groups and its effect on household food security.

Characteristics	Df	Chi-square value	P value	Decision
Perceived Effect	4	32.882	0.000	S

Significant $P \leq 0.05$ Not significant $P \geq 0.05$

S= Significant

NS=Not significant

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